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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,422	03/21/2001	Emin Tuncay Ustuner	10593/4	4075

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EXAMINER	
PANTUCK, BRADFORD C	

ART UNIT	PAPER NUMBER
3731	

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/814,422	USTUNER, EMIN TUNCAY	
	Examiner	Art Unit	
	Bradford C Pantuck	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/29/2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *48-76* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *51-72 and 74-76* is/are allowed.

6)☒ Claim(s) *48-50 and 73* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10/10/2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 48-50 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,306,281 to Beurrier. Regarding Claim 48, Beurrier discloses a method for "semi-automatic knot tying" [Column 1, lines 37-43]. Beurrier discloses a driving handle (135) and a needle (102) at the other end of the instrument. The user must prearrange the suture thread before driving the needle, but with one triggering event, the needle forms a *partially tied loop* [Column 2, lines 43-48]. The user must then manually tighten the knot, which Beurrier implies has already been formed. The tightness of the knot is only a relative matter, and even the Applicant's invention leaves the tightening of the knot to the user [Specification, page 5, line 16-19]. Therefore, even though Beurrier's knot is not completely tightened, he is still forming a knot. His knot is formed "by looping the thread around sloped extension 116 and through open throat area 114" *not by a procedure formed thereafter* (such as manual intervention) [Column 6, lines 11-13]. Thus, when the needle swings through the gap (114) [see Fig. 1], a partially tied knot will be formed.

2. Regarding Claim 49, Beurrier *implicitly* discloses cutting the suture on both sides of the knot after tying the knot. Beurrier tells us that the intent of his invention is to suture tissues that have been opened up for one reason or another [Column 2, lines 40-48]. Obviously, Beurrier will want to remove the dangling/long ends of the knot

that will only interfere with the body and not serve any purpose. He will need to cut the side of the suture with the needle (102) attached to it in order to remove the needle from the body.

3. Regarding Claim 50, Beurrier implicitly discloses a delivery system that is capable of suturing repeatedly. It has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.* It is clear that Beurrier's invention can be used again with another suture.

4. Claims 48-50 are also rejected under 35 U.S.C. 102(b) as being anticipated by Publication No. 2002/0116011 A1 to Chee Chung et al. Regarding Claim 48, Chee Chung discloses a method of using a single motion to pass a needle through tissue and to form a knot. Using either trigger 31 or 32, the user can rotate the needle (2) {para. [0027], line 16-end}. In one motion, the needle rotates from the position shown in Figure 12 to the position shown in Figure 13, in which a knot is formed [0040]. Although several other motions (multiple triggering events) were performed prior to Figure 12, only one triggering event is used to go from the state shown in Fig. 12 to the state shown in Fig. 13.

5. Regarding Claim 49, Chee Chung discloses cutting the edges of the suture on both sides of the knot [0067].

6. Regarding Claim 50, Chee Chung discloses repeating this procedure several times {[0040]—last sentence}.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 73 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,306,281 to Beurrier. Beurrier does not disclose tightening the knot using his machine, but instead it is assumed that he does so manually rather than automatically. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to use Beurrier's machine to tighten the knot since it has been held that broadly providing a mechanical or automatic means to replace manual activity, which has accomplished the same result, involves only routine skill in the art.

Allowable Subject Matter

8. Claims 51-72 and 74-76 are allowed.

9. The following is a statement of reasons for the indication of allowable subject matter [claims 51-68 and 74-76]: U.S. Patent No. 5,234,443 to Beurrier et al. does not disclose a method of applying and tying surgical suture, including making suture coils *and then passing the needle and suture through tissue*, as set forth by the applicant. U.S. Patent No. 5,769,862 to Kammerer et al. does not disclose a method of applying and tying surgical suture, including a suture carrier, which grips the

second end of the suture after forming a set of coils. Only member 205 grips the second end of the suture.

10. The following is a statement of reasons for the indication of allowable subject matter [claims 69-72]: None of the prior art of record, either alone or in combination discloses a method of applying and tying suture including performing a single triggering event to form and tighten a first loop and then performing a second triggering event to tighten a second loop.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 4,841,888 to Mills et al. (see also similar inventions by this inventor)

U.S. Patent No. 5,308,353 to Beurrier

Response to Arguments

12. Applicant's arguments, see "Remarks" page 3, lines 21-23 filed 12/29/2003, with respect to the rejection(s)of claim(s) 51, 53, 55, 56, 67, and 68 under 35 USC 102(b) (Beurrier et al.) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent No. 5,306,281 to Beurrier.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradford C Pantuck whose telephone number is (703) 305-8621. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J Milano can be reached on (703) 308-2496. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

BCP
January 29, 2004

MICHAEL J. MILANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700